WEST VIRGINIA SPLATTER FEBRUARY 2026

BOOK REVIEW
UNDERSTANDING YOUR ANTENNA ANALYZER:
A RADIO AMATEURS GUIDE TO MEASURING ANTENNA SYSTSEMS
by: Joel R. Hallas, W1ZR
Published by The American Amateur Radio League, 2013

Like most of my collection of amateur radio books, I picked this one up at a hamfest. I don't recall which one. Unlike many of my purchases, this one did not have the previous owners name or call sign in it. So, instead of thanking one person for passing this text on to me, I have to thank everyone who uses hamfests to spread interesting reads on to young hams.

According to David Sumnet, K1ZZ "This book is intended to introduce readers with a basic understanding of radio equipment and antennas to the ins and outs of antenna analyzers." I think the book does just that. While I don't think W1ZR covered everything there is to know about antenna analyzers; I do think he provides a lot more information than I had before.

In my opinion, one of his most enlightening discussions involves analyzing antenna systems-- not antennas alone. As he points out, lowering the antenna to connect an analyzer, or raising a person up the tower to connect a device to the antenna will change the system and its performance. So, use your instument to analyze your system not just the antenna. Another interesting discussion revolves around the difference between *precision* and *accuracy.* An instument may give a very precise reading to five decimal places but not be accurate due to some inherent flaw in the connection or elsewhere.

I found W1ZR's chapters on other uses for an antenna analyzer and how to enhance your antenna analyzer to be especially interesting. Some of the enhancements require more technical skill than I have now; but they are things I'll keep in mind for later. The least interesting chapter of the book for me, was the review of available analyzers. Probably because I bought my analyzer long before I got the book.

In short, W1ZR has written a valuable book that every ham who builds or modifies antenna systems should read sooner rather than later.

73
Jim Hudson, KE8PNY

What do you call an apology written in dots and dashes?
Remorse code.

INDEXA CLUB LOG OF TEN MOST WANTED ENTITIES			
RANK	**PREFIX**	**ENTITY NAME**	**COMMENTS BY JIM HUDSON, KE8PNY**
1	P5	DPRK (North Korea)	*Everyone knows they don't allow amateur radio in North Korea, This list is one place North Korea will always be number 1.*
2	KH3	Johnston Island	*Johnston Atoll is under the jurisdiction of the US Air Force, so access requires authorization from the USAF. A special permit is also required from the US Fish and Wildlife Service.*
3	KH7K	Kure Island	*Kure Atoll is 48 nautical miles west-northwest of Midway Atoll. Part of Hawaii, it is a Wildlife Bird Sanctuary run by the Hawaiian Dept. of Land & Natural Resource-Division of Forestry & Wildlife.*
4	CE0X	San Felix Islands	*San Félix is only two square kilometers. Cerro Amarillo, the highest point is only 193 meters above sea level. It is one of the Chilian Islands*
5	FT5/X	Kerguelen Island	*Kerguelen Islands (aka Desolation Islands) are under French controll in the sub-Antartic region, one of the most isolated regions on earth. The climate is cold and harsh with high winds. The seas are rough and ice-free year-round. There are no indigenous inhabitants, but France maintains a presence of 45 to 100 soldiers, scientists, engineers, and researchers.*
6	BS7H	Scarborough Reef	*Scarborough Reef is a triangle-shaped chain of reefs and rocks with an area of 58 square miles. The atolls' highest point, South Rock, is 5 foot 11 inches above sea level at high tide. The atoll, claimed by Red China, Taiwan and the Philippines, is about 123 miles west of Subic Bay in the Philippines. Since 2012, the reef has been controlled by the Chinese Coast Guard. No permanent structures are there.*
7	BV9P	Pratas Island	*Pratas Island, also known as the Tungsha Island (Chinese:'East Sand Island'), is a coral island in the northern part of the South China Sea about 170 nautical miles southeast of Hong Kong. With an area of about 590 acres, it is the largest island in the South China Sea.*
8	YVD	Aves Island	*Aves Island is a depedency of Venezuela. The island has been the subject of numerous territorial disputes with the US, Dominica, Netherlands and the United Kingdom. It is 1,230 feet long and less than 160 feet wide. On a calm day it is 13 feet above sea level. It is sometimes completely submerged during hurricanes. It is 340 miles north of the Venezuelan mainland.*
9	3Y/P	Peter I Island	Peter I Island, administered by Norway, is an uninhabited volcanic island in the Bellinghausen Sea off Antartica. It is about 7 by 12 miles in size. Its highest point is the 5,380 foot high Lars Christian Peak/ Nearly all the island is covered by a glacier.
10	3Y/B	Bouvet Island	Bouvet Island is another uninhabited volcanic sub-Antartic island administered by Norway. It is a protected nature preserve in the South Atlantic Ocean. It is the world's most remote island.

OVERHEARD AT DX BREAKFAST
(8:00 On Tuesday mornings at Bob Evans on Jeffferson Road, South Charleston)

"As I used to tell students in my trouble-shooting class: Just start; in the middle, at the beginning or towards the end. It doesn't matter. Just start!"

John Jones, WB8CQV

"Try it and see if it works."

Tom Weaver. K8TW

ALTERNATIVE POWER SOURCES FOR DX-PEDITIONS

The Desecheo DXpedition Deployment Team recently installed Remote Deployment Units (RDU's) on Desecheo Island. These RDU's use photovoltic solar arrays, battery systems, Starlink internet and monitoring equipment that enables remote operation while having minimal environmental impact on the Wildlife and Nature Preserve. All work was accomplished in strict compliance with U.S. Fish & Wildlife Service requirements. This is a major milestone for this project and has the potential for future operations in environmentally sensitive locations.

Reportedly the batteries only had a 15% charge some mornings. Of course, the photovoltic cells did not generate any power over night. My thoughts immediately went back to my days sailboating along the east coast of Florida. Almost every sailboat had a small wind generator to recharge the battery bank. A few had photovoltic cells as well.

One supplier of boating equipment, sells two types of wind generators. One style (at right) has what looks like a traditional cooling fan to turn a 500 watt generator. This is the style seen on huge wind generators near Davis and Richwood here in West Virginia. One of the complaints about this style is the impact on birds that fly into the turning blades. So this version may not be suitable for use in a wildlife preserve.

The second style (below) is an Aisinilalao Vertical Wind Turbine Generator rated at 8,000 or 10,000 watts. The spiral blades in these compact units have less noise and vibrations than the first type. A wire mesh around the blades would reduce the efficency some, but would prevent birds or other wildlife from coming in contact with the blades.

Current prices for either style range from $500 to $1,000. Depending on the maker and specific kit ordered, cables, charge controllers, charge monitors and other accessories may come with the generator.

These wind generators may not be a great help for field day in wood lands or other light wind locations. I wouldn't want to rely on a wind generator only, nor would I want to depend on photovoltic cells alone. A combination of the two charging systems should make charging batteries more certain. Especially on the many windy islands listed in the DX Club Log.

73

Jim Hudson, KE8PNY

Where do cows buy their mobile radios?

From a cattle-log.

Where do extension cords shop?

At the outlet mall!

Blame Scott Nasby, KB8ZIO

HACKS FOR HAMS

Many Hams have problems managing paracord and other line and cordage. This is especially obvious at Field Day when things are hectic anyway. Here us a method of coralling all the ropes and cords that try to get away.

My Dad used to use a bolt, three nuts and two fender washers to make a spool for his mason's line. He used his electric drill to rewind the lenghty cord. Fender washers aren't big enough for heavier line. I have a can opener that cuts into the side of the rim, leaving no sharp edges. This leaves me with a lid that can be replaced on the can if needed. One day the light bulb went off and I realized each lid could be an oversized fender washer. The resulting reel, attached to my drill, can be seen to the right.

The parts of a partially assembled reel can be seen at the left. I tried to make reels using the long bolts out of crutches but their threads don't go all the way to the “head” end. A friend pointed out that crutches included plastic rods over the bolts to lessen the impact on users hands. Without the vertical parts of the crutch these rods weren't long enough to use the crutch bolts. I did have one eye-bolt in my junk box(es) with threads only at one end. By using the plastic rod, the eye bolt and my homemade fender washers I came up with a workable reel, as seen to the right.

I hope this provides a solution to your paracord chaos.

WV SPLATTER

WV Splatter is a digital newsletter for all amateur radio operators in the Mountain State and anyone interested in the hobby regardless of where they live. If you know anyone who might be interested, pass it on. The West Virginia Amateur Radio Club has posted all issues of this newsletter on their web page at www.wv8ar.com . It is also submitted each month to the *Digital Library of Amateur Radio and Technology.*

I welcome content for WV Splatter from all sources; book or equipment reviews, pictures, ham related jokes, annoucements of events in your area and items for sale or sought after. Send submissions to me at nettlescreek@frontier.com . Use the same email address to send an email address for anyone who wants added to the WV Splatter distribution list.

73 and thanks to all

Jim Hudson, KE8PNY